

In the Claims:

Please amend claims 1, 7 and 9-11, and add new claims 45-64, as follows:

- 1) **(Currently Amended)** A computer-implemented forecasting system for determining time-phased sales forecasts and planned replenishment shipments for products that sell in low volumes in a retail store supply chain, the system comprising:
 - a) a computing resource having a processor, a memory and a program stored in said memory, wherein said processor executes said program, said program including:
 - i) a first portion that determines projected sales of a plurality of low-volume products for a retail store in the supply chain during a first time period using (i) numerical representations of seasonal selling profiles for each of said plurality of low-volume products during said first time period and (ii) randomization techniques, wherein said projected sales are determined with respect to each of said plurality of said low-volume products by evaluating when a mathematical product obtained by multiplying a random number times a summation of said numerical representations of seasonal selling profiles for said each low-volume product for a plurality of second time periods exceeds a threshold; and
 - ii) a second portion that, using said projected sales determined by said first portion, distributes within said first time period replenishment shipment dates for each of said plurality of low-volume products in a way that avoids overstating demand in early portions of said first time period.
- 2) **(Previously Presented)** A system according to claim 1, wherein said first portion generates a random number for each of said plurality of low-volume products.
- 3) **(Previously Presented)** A system according to claim 2, wherein said first portion uses said random number to determine an offset from the first day of said first time period for each of said low-volume products, wherein said offset is used by said second portion to define said replenishment shipment dates .

- 4) **(Previously Presented)** A system according to claim 1, wherein said second portion determines different shipment dates within said first time period for low-volume products having more than one projected sale during said first time period.
- 5) **(Previously Presented)** A system according to claim 1, wherein said second portion adjusts said shipment dates for at least some of said plurality of low-volume products when excess inventory of said at least some of said plurality of low-volume products exists at said retail store.
- 6) **(Previously Presented)** A system according to claim 1, wherein said first portion determines projected sales for a plurality of low-volume products for a plurality of retail stores in the supply chain during said first time period.
- 7) **(Currently Amended)** A method of determining time-phased sales forecasts and planned replenishment shipments for products that sell in low volumes in a retail store supply chain using a computing resource having a processor, a memory and a program stored in the memory, wherein the processor executes said program, the method comprising the steps of:
 - a) using the computing resource to determine projected sales of a plurality of low-volume products for a retail store in the supply chain during a first time period and randomization techniques by evaluating for each of said plurality of low-volume products when a mathematical product obtained by multiplying a random number times a summation of numerical representations of seasonal selling profiles for said each low-volume product for a plurality of second time periods exceeds a threshold; and
 - b) distributing using the computing resource to distribute within said first time period shipment dates for each of said plurality of low-volume products based on said projected sales, with said shipment dates being distributed so as to avoid bunching up replenishment shipments early in said first time period in a way that does not reflect actual demand for said plurality of low-volume products.
- 8) **(Previously Presented)** A method according to claim 7, wherein said step b includes the step of adjusting said shipment dates for at least some of said plurality of low-volume products

when excess inventory of said at least some of said plurality of low-volume products exists at said retail store.

9) **(Currently Amended)** A computer-implemented forecasting system for determining time-phased sales forecasts and planned replenishment shipments for products that sell in low volumes in a retail store supply chain, the system comprising:

- a) forecasting means for determining projected sales of a plurality of low-volume products for a retail store in the supply chain during a first time period using numerical representation of seasonal selling profile for each of said plurality of low-volume products during said first time period and randomization techniques, wherein said projected sales are determined with respect to each of said plurality of said low-volume products by evaluating when a mathematical product obtained by multiplying a random number times a summation of said numerical representations of seasonal selling profiles for said each low-volume product for a plurality of second time periods exceeds a threshold; and
- b) replenishment shipment means for distributing within said first time period, based on said projected sales, shipment dates for each of said plurality of low-volume products so as to avoid overstating demand for said plurality of low-volume products at the beginning of said first time period.

10) **(Currently Amended)** A system according to claim 9, wherein said replenishment shipment means calculates an aggregate demand for said plurality of low-volume products to be shipped on said shipment dates for use by entities that supply retail stores in the supply chain.

11) **(Currently Amended)** A computer-readable storage medium for storing a computer program executable on a computer, the program including instructions for performing the steps of:

- a) determining projected sales of a plurality of low-volume products for a retail store in the supply chain during a first time period using seasonal selling profile for each of said plurality of low-volume products during said first time period and randomization techniquesby evaluating for each of said plurality of low-volume products when a mathematical product obtained by multiplying a random number times a summation of

numerical representations of seasonal selling profiles for said each low-volume product for a plurality of second time periods exceeds a threshold; and

b) distributing within said first time period shipment dates for each of said plurality of low-volume products using said projected sales, ~~with said shipment dates being distributed so as to avoid bunching up said aggregate demand early in said first time period in a way that does not reflect actual demand for said plurality of low-volume products.~~

12) **(Previously Presented)** A medium according to claim 11, wherein said step b includes the step of adjusting said shipment dates for at least some of said plurality of low-volume products.

13-41) **(Canceled)**

42. **(Previously presented)** A system according to claim 1, wherein said second portion determines an aggregate demand for said plurality of low-volume products to be shipped on said replenishment shipment dates for use by entities that supply retail stores in the supply chain in place of forecasts.

43. **(Previously presented)** A method according to claim 7, further including determining an aggregate demand for said plurality of low-volume products to be shipped on said shipment dates for use by entities in the supply chain that supply retail stores in place of forecasts.

44. **(Previously presented)** A computer-readable medium according to claim 11, wherein said distributing step includes determining an aggregate demand for said plurality of low-volume products to be shipped on said shipment dates for use by entities in the supply chain that supply retail stores.

45. **(New)** A system according to claim 1, wherein said first portion indicates that a projected sale of each of said plurality of low-volume products occurs in that one of said plurality of

second time periods in which, for said each low-volume product, said mathematical product exceeds said threshold.

46. (New) A system according to claim 1, wherein each of said numerical representations is a percentage of total sales over a third time period for a corresponding one of said plurality of low-volume products that is projected to fall in one of said plurality of second time periods.

47. (New) A system according to claim 46, wherein said second time period is a week and said third time period is a year.

48. (New) A system according to claim 1, wherein said threshold for each of said plurality of low-volume products equals said random number times a summation of said numerical representations for said first time period for said each low-volume product.

49. (New) A system according to claim 1, wherein said threshold is the integer 1.

50. (New) A system according to claim 7, wherein said determining step includes indicating that a projected sale of each of said plurality of low-volume products occurs in that one of said plurality of second time periods in which, for said each low-volume product, said mathematical product exceeds said threshold.

51. (New) A system according to claim 7, wherein each of said numerical representations used in said determining step is a percentage of total sales over a third time period for a corresponding one of said plurality of low-volume products that is projected to fall in one of said plurality of second time periods.

52. (New) A system according to claim 51, wherein said second time period is a week and said third time period is a year.

53. (New) A system according to claim 7, wherein said threshold for each of said plurality of low-volume products used in said determining step equals said random number times a

summation of said numerical representations for said first time period for said each low-volume product.

54. (New) A system according to claim 7, wherein said threshold is an integer.

55. (New) A system according to claim 9, wherein each of said numerical representations is a portion of total sales over a third time period for a corresponding one of said plurality of low-volume products that is projected to fall in one of said plurality of second time periods.

56. (New) A system according to claim 9, wherein said second time period is shorter than said third time period.

58. (New) A system according to claim 9, wherein said threshold for each of said plurality of low-volume products equals said random number times a summation of said numerical representations for said first time period for said each low-volume product.

59. (New) A system according to claim 9, wherein said threshold is an integer.

60. (New) A system according to claim 11, wherein said determining step includes indicating that a projected sale of each of said plurality of low-volume products occurs in that one of said plurality of second time periods in which, for said each low-volume product, said mathematical product exceeds said threshold.

61. (New) A system according to claim 11, wherein each of said numerical representations used in said determining step is a percentage of total sales over a third time period for a corresponding one of said plurality of low-volume products that is projected to fall in one of said plurality of second time periods.

62. (New) A system according to claim 11, wherein said threshold for each of said plurality of low-volume products equals said random number times a summation of said numerical representations for said first time period for said each low-volume product.

64. (New) A system according to claim 1, wherein said threshold is one of the following: a fraction and an integer.

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